CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently amended) An *in vitro* method to detect the presence of bladder transitional cell carcinoma (TCC) in an individual~~, to determine the stage or severity of this cancer in an individual~~ or to monitor the effect of the therapy administered to the individual with this cancer, that comprises:

a) the detection and/or quantification of the fibroblast growth factor receptor 3 (FGFR3) ~~FGFR3~~ protein in a sample of an individual, wherein the sample is a bladder tissue or urine, and

b) the comparison of the amount of FGFR3 protein detected in a sample of an individual, with their normal reference values,

wherein, increased levels of FGFR3 protein relative to normal reference values are indicative of bladder TCC, and normal references values in samples are from subjects without bladder transitional cell carcinoma.

2-3. (Canceled)

4. (Currently amended) The method ~~Method~~ according to claim 1 in which the sample of bladder tissue is obtained ~~by any conventional method, preferably~~ by cystoscopy.

5. (Canceled)

6. (Currently amended) The method ~~Method~~ according to claim 1 in which the sample to be analysed is obtained from an individual not previously diagnosed with bladder transitional cell carcinoma.

7. (Currently amended) The method ~~Method~~ according to claim 1 in which the sample to be analysed is obtained from an individual who has been previously diagnosed with bladder transitional cell carcinoma.

8. (Currently amended) The method ~~Method~~ according to claim 1 in which the sample to be analysed is obtained from an individual receiving treatment, or who has been treated previously against bladder transitional cell carcinoma.

9. (Currently amended) The method ~~Method~~ according to claim 1 characterised in that it comprises the extraction of the sample to obtain an extract of proteins.

10. (Currently amended) The method ~~Method~~ according to claim 1 characterised in that the detection and/or quantification of the FGFR3 protein

comprises a first step, in which the protein extract of the sample is placed in contact with a composition of one or more specific antibodies, against one or more epitopes of the FGFR3 protein, and a second step, in which the complexes formed by the antibodies and the FGFR3 protein are quantified.

11. (Currently amended) The method ~~Method~~ according to claim 10, characterised in that said antibodies correspond to monoclonal or polyclonal antibodies, intact or recombinant fragments of antibodies, combibodies and Fab or scFv antibody fragments, specific against the FGFR3 protein; these antibodies being human, humanised or of non-human origin.

12. (Currently amended) The method ~~Method~~ according to claim 10 characterised in that in the detection and/or quantification of the complexes formed by antibodies and the FGFR3 protein, the techniques used are selected from the group comprised by: western-blot, ELISA (Enzyme-Linked Immunosorbent assay), RIA (Radioimmunoassay), Competitive EIA (Competitive Enzyme Immunoassay), DAS-ELISA (Double Antibody Sandwich-ELISA), immunocytochemical or immunohistochemical techniques, techniques based on the use of biochips or protein microarrays that include specific antibodies, assays based on the precipitation of colloidal gold in formats such as dipsticks; or by affinity chromatography techniques, ligand binding assays or lectin binding assays.

13-29. (Canceled)

30. (New) An *in vitro* method to assess the stage or severity of bladder transitional cell carcinoma (TCC) in an individual, that comprises:

a) the detection and/or quantification of the fibroblast growth factor receptor 3 (FGFR3) FGFR3 protein in a sample of an individual, wherein the sample is a bladder tissue or urine, and

b) the comparison of the amount of FGFR3 protein detected in a sample of an individual, with their normal reference values,

wherein, increased levels of FGFR3 protein relative to normal reference values are indicative of bladder TCC, and normal references values in samples are from subjects without bladder transitional cell carcinoma.

31. (New) The method according to claim 30 in which the sample of bladder tissue is obtained by cystoscopy.

32. (New) The method according to claim 30 in which the sample to be analysed is obtained from an individual not previously diagnosed with bladder transitional cell carcinoma.

33. (New) The method according to claim 30 in which the sample to be analysed is obtained from an individual who has been previously diagnosed with bladder transitional cell carcinoma.

34. (New) The method according to claim 30 in which the sample to be analysed is obtained from an individual receiving treatment, or who has been treated previously against bladder transitional cell carcinoma.

35. (New) The method according to claim 30 characterised in that it comprises the extraction of the sample to obtain an extract of proteins.

36. (New) The method according to claim 30 characterised in that the detection and/or quantification of the FGFR3 protein comprises a first step, in which the protein extract of the sample is placed in contact with a composition of one or more specific antibodies, against one or more epitopes of the FGFR3 protein, and a second step, in which the complexes formed by the antibodies and the FGFR3 protein are quantified.

37. (New) The method according to claim 36, characterised in that said antibodies correspond to monoclonal or polyclonal antibodies, intact or recombinant fragments of antibodies, combibodies and Fab or scFv antibody fragments, specific against the FGFR3 protein; these antibodies being human, humanised or of non-human origin.

38. (New) The method according to claim 36 characterised in that in the detection and/or quantification of the complexes formed by antibodies and the FGFR3 protein, the techniques used are selected from the group comprised by: western-blot, ELISA (Enzyme-Linked Immunosorbent assay), RIA (Radioimmunoassay), Competitive EIA (Competitive Enzyme Immunoassay), DAS-ELISA (Double Antibody Sandwich-ELISA), immunocytochemical or immunohistochemical techniques, techniques based on the use of biochips or protein microarrays that include specific antibodies, assays based on the precipitation of colloidal gold in formats such as dipsticks; or by affinity chromatography techniques, ligand binding assays or lectin binding assays.